

<https://ojs.fkip.unismuh.ac.id/index.php/jcie>

## THE USE OF ELECTRONIC U-DICTIONARY TO IMPROVE NON-ENGLISH STUDENTS' VOCABULARY MASTERY AT UNIVERSITAS MUHAMMADIYAH MAKASSAR

Ahmad Azhar<sup>1</sup>, Muhammad Zia ul Haq<sup>2</sup>, Sulkifli<sup>3</sup>

<sup>1,2,3</sup>Universitas Muhammadiyah Makassar, Indonesia

105351104718@unismuhmakassar.ac.id.

Article Info	Abstract
<p>Received: April 29, 2021 Revised: May 20, 2021 Accepted: June 14, 2021 Published: June 20, 2021</p> <p><b>Keywords:</b> Electronic U-Dictionary, Vocabulary, Pre-Experimental Research</p>	<p>This thesis aims at finding out whether or not the use of Electronic U-Dictionary effective to improve non English students' vocabulary mastery. This research is pre-experimental research with pre-test and post-test design. The pretest was given before giving treatment and the posttest was given after giving treatment. The population of the research was the fourth semester students of PGSD Study Program in Muhammadiyah University of Makassar academic year 2022-2023. There are thirteen classes where each class consist of 25 students, so the sum of the population is 325. The sampling technique used is cluster random sampling. The researcher used one class as the sample which contained 25 students. To get the data, the researcher used vocabulary test as the instrument. The data were then analyzed by using SPSS. The results of the statistical analysis shows that the mean score of the pre-test is 53,5 and post-test is 81,6. The result of <math>P=0.00</math> while <math>\alpha=0.05</math>. it could be that <math>\alpha</math> is higher than <math>P</math> with degree of freedom (<math>df = 25-1 = 24</math>). Therefore, the alternative hypothesis (<math>H_1</math>) is accepted and null hypothesis (<math>H_0</math>) rejected. Based on analysis of the result, it could be summed up that the use of Electronic U-Dictionary is effective in teaching vocabulary.</p>
<p>How to Cite: Azhar, A., ul Haq, M. Z. ., &amp; Sulkifli. (2021). THE USE OF ELECTRONIC U-DICTIONARY TO IMPROVE NON-ENGLISH STUDENTS' VOCABULARY MASTERY AT UNIVERSITAS MUHAMMADIYAH MAKASSAR. Journal of Computer Interaction in Education, 4(1), 40-49. Retrieved from <a href="https://jurnal.fkip.unismuh.ac.id/index.php/jcie/article/view/998">https://jurnal.fkip.unismuh.ac.id/index.php/jcie/article/view/998</a></p>	

### INTRODUCTION

English is international language. That's why it is important to be learnt and taught. There are many countries have made English as a required subject in school and university. One of the most important parts of English that should be mastered in order to be able to

speak and write is vocabulary. We cannot overstate the importance of vocabulary in English. The learners who know grammar well but do not memorize vocabulary would find difficulties to communicate what they want to say. A student, on the other hand, is simply learning because the importance of new words is often emphasized, whether in a book or in classroom, vocabulary learning is one of an essential aspect in learning a foreign language. In fact, vocabulary mastery is one of problem faced by EFL students. Most of the students including in university are difficult in speaking or writing English because they have very limited vocabulary although they have studied English from High school. This problem also happened to the third semester students of PGSD in Muhammadiyah University of Makassar.

Referring to the fact stated before then the writer assumed that an alternative way to teach vocabulary is needed. One of the alternative ways is teaching by using media which suitable with the students' era in order to make the materials enjoyable, interesting and challenging so that the teacher can give motivation to the students to learn and help them. Today is era 4.0 where student tend to choose learning through electronic media like smart phone. One of the applications is electronic U Dictionary. Jiang in (Safina, 2019) claims that the greatest advantage of electronic dictionaries is that they are very suitable and easy to be used. The number of electronic dictionaries is also increasing. Some can pronounce words clearly, provide example sentences to explain how to use words, and memorize certain words that are not easy to memorize. Meanwhile Zheng& Wang in (Safina, 2019) explain that electronic dictionaries have become interesting, preferred and popular among English learners of all levels.

In this study, the researcher chooses electronic dictionary asan application in teaching vocabulary. One of the electronic dictionaries is Electronic U dictionary. Dealing with the background then the objective of this research is to find out whether or not the use of Electronic U-Dictionary to improve non-English students' vocabulary mastery

## LITERATURE REVIEW

Learning vocabulary is very essential in learning foreign language like English. If the students don't have enough vocabulary, they will find difficulties in voicing their comprehension. Mastering vocabulary is important due to the fact that someone is choosing you to the phrases you are saying and having higher vocabulary knowledge can improve someone's capability to think (Sugiyanta, 2021).

Many people think learning English is difficult but there are some ways have been created in order to make students easier. If one time previously, students who would like to study English especially to look for the word translation they have to open printed dictionary and troublesome books, then today they can use an easy and practical electronic dictionary using the students' android. One of the electronic dictionaries is U-dictionary. It is one of media which can be used in mobile whether it online or offline. It is a dictionary that the students can download from an android or from the smartphone. It may be a good application for interpreting more than 30 dialects without web association, U Dictionary right now bolsters Android 4.0.0 and IOS 3.0.0 smartphones which were fair discharged on Walk 24th, 2016, advertised by Youdao, Hongkong. In 2019, there were 50 million people who downloaded this application (Riadi & Handayani, 2020, (Yuliyanti & Siahaan, 2022).

The preferences (advantages) of utilizing U-Dictionary are costless, special, and basic to induce within the bundled software and reasonable download it. For Apple smartphone users it can be download from App Store, and it is also available for Android users it can be download from Play Store. There are features which can check and give the rating for speaking pronunciation and fluency when people use this app. According to (Krismonika et al., 2021) the use of U-Dictionary can help the students to pronoun the vocabulary meanwhile (Muslimawati et al., 2021) using electronic U-dictionary in learning vocabulary rings some positive effect for students, those positive effects are a) it is more practical so the students are easy to use it, 2) it can add students' vocabulary, 3) it can make students refresh, anytime and anywhere the students can use it, and 4) it is suitable with the students era that is digital era.

Research conducted by (Wulandari & Handayani, 2020) found that the use of U-Dictionary in teaching vocabulary brings positive effects as a learning media. It can increase students' vocabulary significantly. They further explained that U-dictionary is easy to use and it doesn't only improve the students' vocabulary but it also improves students' pronunciation since this application provides the pronunciation menu. It is also argued by (Putri F.S., 2021) that the use of U-Dictionary brings some advantages that can make English learning quickly are as follows: a) it can translate picture with a Camera. students can use it to translate English that is displayed anywhere which can directly use the camera. The students just scan it, without re-typing it, then the meaning will be translated into Indonesian immediately, b) Students can learn English from the Android Lock screen. Besides the students can learn

English by using a camera; by installing U-Dictionary on Android, they can also learn English directly from the lock screen of their smartphone. So, they can open the lockscreen anytime, then they will immediately be treated to new English vocabulary that they can learn, c) besides that, the students also can Play Games in Learning English by Using the U-Dictionary, they can learn English in a simple and fun way. So, by using this English learning application the students can enrich their new vocabulary through the games provided in it.

## METHODS

In this study, the researcher applied pre-experimental design with pre-test, treatment, and post-test. It was used to know the vocabulary improvement through the use of Electronic U-Dictionary to the third semester students of PGSD study Program in Muhammadiyah University of Makassar.

This research involved one group of students with pre- test, treatment and post- test design.

Where:

O1= pre-test,

X= Treatment,

O2= Post-test

The instrument used by the researcher in gathering the data is vocabulary test (translating vocabulary test). The researcher gave 10 English vocabularies to the students and ask them to translate them into Bahasa Indonesia and 10 vocabularies in Bahasa Indonesia that should be translated into English. The students must complete them in 45 minutes. The test was used in pretest and posttest, which consists of three parts of speech namely "Noun, Verb and Adjective". This vocabulary test was given in the pre-test and post-test. It aims to know students' vocabulary improvement.

The data were collected used three procedures pre-test, treatment, and post-test. In the treatment, the researcher greeted the students and checked the attendance list and asked the students to download Electronic U Dictionary application through Play Store in their smartphones in the first meeting. The researcher explained how to use Electronic U Dictionary to study Vocabulary and then the researcher gave 30 Nouns for each meeting. The researcher asked the students to translate the meaning of the vocabulary using camera on the

U-dictionary after that the researcher asked the students to mention the meaning of the vocabularies one by one after that the researcher asked the students to click the sound sign on U Dictionary to listen to the pronunciation of the vocabularies and asked the students to repeat pronouncing the words. After that the students were given chance for 20 minutes to memorize the vocabularies with their friends and then the researcher gave them vocabulary exercise and collected them to be corrected after that the researcher asked the students difficulties and then closed the meeting.

The data gathered through the instrument were analyzed quantitative descriptive statistical analysis. The researcher analyzed the result of the students' answers by correcting answer test and counted by using the formula:

$$\text{Score} = \frac{\text{students' correct answer}}{\text{total test items}} \times 100$$

After that classified the students' score using the following classification

SCORES	CLASSIFICATION
96-100	Excellent
86-95	Very Good
76-85	Good
66-75	Average
56-65	Fair
46-55	Poor
0-45	Very Poor

and then the researcher calculated the mean score, standard deviation and the test significance by using program SPSS version 20.

## FINDING AND DISCUSSION

The aims of the research is to know whether or not the use of Electronic U-Dictionary to improve non English students' vocabulary mastery. The instrument used to get the data was vocabulary test. In this part, the researcher presents the students' score, the students' score classification, the mean score, the standard deviation of pretest and posttest. Furthermore, in this chapter the researcher also presents the result of test of significant, and the standard signification.

Table. 2 Students' Classification Score

No	Classification	Score	Pre-Test		Post-test	
			F	P (%)	F	P (%)
1.	Excellent	96-100	0	0	0	0
2.	Very Good	86-95	2	8	9	36
3.	Good	76-85	1	4	11	44
4.	Average	66-75	1	4	5	2
5.	Fair	56-65	5	20	0	0
6.	Poor	35-55	16	64	0	0
7.	Very Poor	0-35	0	0	0	0
<b>Total</b>			<b>25</b>	<b>100</b>	<b>25</b>	<b>100</b>

Referring to the data in the table 2 above, it can be said that the students score in pre-test are mostly in poor category. The highest score got by the students is between 86-95. Where there are 2 students got it. It is categorized into very good. Meanwhile in the lowest is poor got by 16 students but it improved in post-test. In post-test no one students get it can be seen that before giving the treatment by using electronic U-Dictionary, there are no students get excellent, fair, poor and very poor classification. Then there are 9 students (36%) get "very good", while there are 11 students (44%) get "good", mean while there are 5 students (20%) get "average". It can mean that the use of U-dictionary improves the students' vocabulary after giving treatment.

After calculating the students score in pre-test and post-test the mean score and standard deviation of both tests are present in the following table:

Table 3. The mean scores and standard deviation of pre-test and post-test.

Type of Test	Mean Score	Standard Deviation
Pre-test	53.52	12.333
Post-test	81.60	5.802

The table above shows the mean score and standard deviation of pre-test and post-test, were the mean score of pre-tests (53.52) is lower than the mean score of post-tests (81.60). While standard deviation of pre-test is 12.333 and the standard deviation of post-test is

5.802.

To test the hypotheses the researcher used SPSS. In this research, the researcher was using t-test or testing of significance for the paired sample t-test. It is tested in order to know the significance difference between the mean score got by the students in the pretest and post-test.

Assumption that the level of significant ( $\alpha$ ) = 0.05, the only thing which is need the degree of freedom (df) = N-1, where N=20, it is present in the following table

Table 4. The t-test students' achievement

Variable	P-value	$\alpha$
O <sub>1</sub> X O <sub>2</sub>	0.00	0,05

The data from the table above indicate that the result of P=0.00 while  $\alpha=0.05$ . it could be summed up that  $\alpha$  is higher than P with degree of freedom (df) = 25-1 = 24. Therefore, the alternative hypothesis (H1) is accepted and null hypothesis (H0) rejected. Based on analysis of the result, it could be concluded that the use of Electronic U-Dictionary is effective in teaching vocabulary.

Dealing with this research, the researcher conducted the pre-test by giving vocabulary test to the students. The number of the of the vocabularies is 20 and then the researcher asked the students to translate those vocabularies into Indonesia. The same test was also given in the post-test. Before the researcher gave post-test to the students, the students were treated by using Electronic U-dictionary for four meetings. In the treatment, the researcher gave 30 vocabularies to the students and asked them to translated them using electronic U-Dictionary and the researcher asked the students to mention the meaning of the vocabularies one by one. Before the students were asked to memorize the vocabularies, they had to listen first how those vocabularies are pronounced by using the Sound features available in Electronic U-Dictionary application so they can pronounce the vocabularies correctly. After memorizing, the students were then they did vocabulary exercise.

The result of the pre-test shows that the students' mean score was in poor category (53,52) meanwhile in post-test, the students mean score improved to 81,60 which is classified as good category. The result of this research indicated that the use of Electronic U-Dictionary can improve students' vocabulary mastery. This research was similar to the research conducted

by Hapsari (2022) she found in the researches that 60% of the 40 students agree that the U-Dictionary application assists them to learn English vocabulary. Another research also supported the result of this research. Wiratman (2021) who found that the use of electronic u-Dictionary in teaching vocabulary can influence the students' vocabulary achievement.

As long as doing the treatment, the researcher observed that the students could enjoy learning vocabulary by using Electronic U-Dictionary and relating to the pronunciation, the students were very helped by the existence of pronunciation features in Electronic U-Dictionary. In this case when students were learning vocabulary using Electronic U-Dictionary, most of the vocabularies taught to them are not familiar for them and they found difficulties in pronouncing them but that problem could be overcome because the researcher tell the students to use pronunciation feature available on the application. This case is in line with the advantages propose Krismonika et al. (2021) who said that the use of U-Dictionary can help the students to pronoun the vocabulary because it has some features which can check students on the word ~~pronun~~so they can pronounce the word correctly.

Relating to the disadvantages of Electronic U-Dictionary use which is proposed by Muslimawati et al. (2021), that is low battery, the researcher tried to anticipated them by reminding the students to fully charge their smart phone before coming to the class. For other disadvantages like the appear of advertisement when using it so it, the researcher didn't find any students got trouble because of it.

## CONCLUSION AND SUGGESTION

The use of Electronic U-Dictionary is effective to improve vocabulary mastery of non-English students at Universitas Muhammadiyah Makassar. It was proven by the significant difference between the students' mean score of pretest and posttest. In pretest, the students' mean score is 53,52 and the students' score in posttest is 81,60. moreover, it could be also seen in the result of comparing means rest where  $P= 0.00$ . it means that it is effective to use Electronic U-Dictionary in teaching vocabulary.

Based on the conclusion above, the researcher suggested to the next researchers who are interested in conducting research with the same topic, they can apply it to the other level, for examples, Elementary school, junior or senior high school.

## REFERENCES

- Aji, R. W., & Farida, A. N. (2019). *The Use of Flashcards with Numbered Heads Together to Improve Students' Vocabulary Knowledge*. 8(1), 37–48.
- Alhabahba, M. M., Mahfoodh, O. H. A., Pandian, A., Mohammad, Y. M., Ahmed, E. W., Albdour, A., & Al Bazar, H. (2014). Check This Word Out! Exploring the Factors That Affect Students' Vocabulary Learning Using Smartphones via Partial Least Squares. *Education Research International*, 2014, 1–10. <https://doi.org/10.1155/2014/672031>
- Dakhi, S., & Fitria, T. N. (2019). The Principles and the Teaching of English Vocabulary: A Review. *JET (Journal of English Teaching)*, 5(1), 15. <https://doi.org/10.33541/jet.v5i1.956>
- Fadila, S. F. (2019). *the Effect of Electronic Dictionary and Reading Interest on*.
- Hapsari, S. K. (2022). The Utilization of U Dictionary Application in Learning Vocabulary. In *Dialectical Literature and Education Journal (DLEJ)* (Vol. 7, Issue 1). <https://dlejpancasakti.ac.id/index.php/dlejpancasakti>
- Krismonika, Maida Norahmi, & Natalina Asi. (2021). The Effect of U-Dictionary on Vowel Pronunciation Ability of the Tenth Grade Students. *EBONY: Journal of English Language Teaching, Linguistics, and Literature*, 1(1), 22– 33. <https://doi.org/10.37304/ebony.v1i1.3099>
- Marco, R., Carneiro, O., & McCarten, J. (2007). *Teaching Vocabulary: lessons from the corpus, lessons for the classroom*.
- Muslimawati, D., Dewi, K., & Silfia, E. (2021). Students' Perception toward Learning Vocabulary by Using U-Dictionary Application at the First Grade Students of SMAN 3 Jambi in Academic Year 2020/2021. *Journal Of English Language Teaching*, 5(2).
- Mustika, A. (2021). *Students' Perception on the Use of Online Dictionary*. Satat Islamic University Sulthan Thaha Saifuddin Jambi.
- Nation. (2005). Teaching vocabulary. In *The Routledge Handbook of Second Language Acquisition and Speaking* (Issuec). <https://doi.org/10.4324/9781003022497-2430>
- Ningias, R. A., & Indriani, L. (2021). EFL Students' Perspectives on Their Self- efficacy in Speaking During Online Learning Process. *English Learning Innovation*, 2(1), 28–34. <https://doi.org/10.22219/englie.v2i1.14965>
- Putri F.S. (2021). *The Use of U-Dictionary as a Media to Increase Students' Listening Skill*.
- Riadi, A., & Handayani, M. (2020). The Students' Perception of Using U- Dictionary in Learning Pronunciation at STBA Pontianak. *Jurnal Ilmiah STBA*, 6.
- Ritonga, L. (2020). *the Effect of English Vocabulary Application on the*.
- Robin, S. J., & Aziz, A. (2022). The Use of Digital Tools to Improve Vocabulary Acquisition. *International Journal of Academic Research in Business and Social Sciences*, 12(1), 2472–2492. <https://doi.org/10.6007/ijarbss/v12-i1/12198>
- Safina, A. (2019). *U-Dictionary in Students' Perspective: What Do They Need to?*
- Şen, N. S. (2021). A Critical Review on the Mobile Assisted Language Learning with a Focus on Empirical Studies ARTICLE INFO. *Journal of Learning and Teaching in Digital Age*, 6(2), 117–126. <https://dergipark.org.tr/en/pub/joltida>
- Suardi, S., & Sakti, J. E. (2019). Teacher Difficulties in Teaching Vocabulary. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 7(2), 92–104. <https://doi.org/10.24256/ideas.v7i2.1026>

- Suharsimi Arikunto, *Prosedur Penelitian*, (Cet. XII, Jakarta, PT. Rineka Cipta,2002),p.77
- Sugiyanta. (2021). First Language Vocabulary Development and Phonological Development of an Indonesian Child: a Case Study. *Dialectical Literature and Educational Journal*,5(2),83-93. <https://doi.org/10.51714/dlejpancasakti.v5i2.34.pp.83-93>
- Ulandari. (2022). *The Use of E-Dictionary as a Media to Enhance the Students' Vocabulary*.
- Wiratman. (2021). *The Influence of Using Electronic Dictionary as Medium on the Students' Vocabulary Mastery at the Eighth Grade of Junior High School 5 Metro*.
- Wulandari, D., & Handayani, C. (2020). The Use of U-Dictionary to Increasing the Studnets' Vocabulary. *Jurnal Penelitian Pendidikan Bahasa Dan Sastra*, 5(2).
- Yuliyanti, C., & Siahaan, L. H. (2022). The Effectiveness of Using U-Dictionary Application in Learning English. *Jurnal Pendidikan Bahasa*, 9(1), 2022.
- Zakian, M. (2022). Using Mobile Applications for Teaching English Vocabularyto Young Language Learners (YLLs): Investigating the Short-and Long-term Impacts. *Language Related Research*, 13(5), 541-564. <https://doi.org/10.52547/LRR.13.5>.